Commonwealth of Kentucky
Natural Resources and Environmental Protection Cabinet
Department for Environmental Protection
Division for Air Quality
803 Schenkel Lane
Frankfort, Kentucky 40601
(502) 573-3382

AIR QUALITY PERMIT

Permittee Name:	**ARKEMA, Incorporated**
Mailing Address:	**2316 Highland Avenue, Carrollton, Kentucky 41008**
Source Name:	**ARKEMA, Incorporated**
Mailing Address:	**2316 Highland Avenue, Carrollton, Kentucky 41008**
Source Location:	**U.S. Highway 42, Carrollton, Kentucky**
Permit Type:	**Federally-Enforceable**
Review Type:	**VF (synthetic minor/conditional major)**
Permit Number:	**VF-04-003**
Log Number:	**56429**
Application Complete Date:	**November 18, 2004**
KYEIS ID #:	**21-041-00002**
AI #:	**690**
SIC Code:	**2819, 2869, 2879, 2899**
Region:	**Florence**
County:	**Carroll**
Issuance Date:	**January 19, 2005**
Expiration Date:	**January 19, 2010**

John S. Lyons, Director
Division for Air Quality

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SECTION A - PERMIT AUTHORIZATION

Pursuant to a duly submitted application the Kentucky Division for Air Quality hereby authorizes the operation of the equipment described herein in accordance with the terms and conditions of this permit. This permit has been issued under the provisions of Kentucky Revised Statutes Chapter 224 and regulations promulgated pursuant thereto.

The permitee shall not construct, reconstruct, or modify any affected facilities without first having submitted a complete application and receiving a permit for the planned activity from the permitting authority, except as provided in this permit or in 401 KAR 52:020, Title V Permits.

Issuance of this permit does not relieve the permitee from the responsibility of obtaining any other permits, licenses, or approvals required by this Cabinet or any other federal, state, or local agency.

SECTION B – EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS AND OPERATING CONDITIONS

PRODUCTION AREA B-05

Emission Point(s)	Process ID (Installation Date)	Process Description
(DC05)	1,000 gal. high-temp reactor, RX-0505 (1970)	Distillation
	Vacuum still, RX-0508 (1984)	(same)
	Vacuum still column, CO-0508 (1973)	(same)
(DC05V)	(see above)	(see above)
(DT05)	Drum/tote loading and unloading	Material handling
(RX05)	4,000 gal. Extractor, RX-0529 (1978)	Chemical reaction
(RX05V)	(see above)	(see above)
(RC05)	2,000 gal. Butyl Boil-off Tank, TK-0527 (1977)	Product/material receiving
	1,000 gal. Forerunner Hold Tank, TK-0501 (1977)	(same)
	1,000 gal. Monobutyl Receiver, WT-0503 (1996)	(same)
	1,000 gal. Dichloride Receiver, WT-0506 (1964)	(same)
	750 gal. Surge Pot, TK-0508A (1994)	(same)
(TE05)	Pipeline/Transport Equipment (N/A)	Pumps, pipes, valves, etc.

Note: For the Emission Point designations, the S refers to an emission point vented under atmospheric conditions and the V refers to venting under vacuum conditions.

CONTROL EQUIPMENT DESCRIPTION:

Condensers and Chillers are used as recovery devices for dibutyl ether
Control Efficiency: N/A

APPLICABLE REGULATIONS:

401 KAR 59:010, *New process operations*, which applies to emission units constructed on or after July 2, 1975.

401 KAR 63:020, *Potentially hazardous matter or toxic substances*

REGULATIONS NOT APPLICABLE:

401 KAR 51:017, *Prevention of significant deterioration of air quality*

401 KAR 60:005, Section 3(uu). Incorporated by reference from 40 CFR 60.480 to 60.489 (Subpart VV), *Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry.* [This Subpart does not apply to Emission Point (TE05) because this Emission Unit (Production Area B-05) does not meet the definition of a process unit in the synthetic organic chemical manufacturing industry. Production Area B-05 does not produce an intermediate or final product listed in 40 CFR 60.489.]

SECTION B – EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS AND OPERATING CONDITIONS (CONTINUED)

401 KAR 63:002, Section 3(c). Incorporated by reference from 40 CFR 63.100 to 63.106 (Subpart F), *National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry*. [This Subpart does not apply to this Emission Unit (Production Area B-05). Production Area B-05 does not produce as an intermediate or final product any chemical listed in 40 CFR 63, Subpart F, Table 1. This declaration of non-applicability also applies to 401 KAR 63:002, Sections 3(b) and (c) incorporating 40 CFR 63, Subparts G and H.]
401 KAR 61:060, *Existing Source Standard for Solvent Operations*

1. Operating Limitations:

a. Maximum annual production for B-05 area shall not exceed 21,000,000 lbs/yr of MBTTC anhydrous (MBTTC/DBTDC process) during any 12 consecutive months. [Synthetic Minor limit]
b. Dibutyl Ether content of butyl crudes raw material shall be maintained at 0.3% (3000 ppm) or less. [Synthetic Minor limit]

Compliance Demonstration Method:

a. Maintain records of the monthly and annual VOC process emissions, based on a 12 month rolling total. Refer to Sections B.5, below.
b. Maintain records of raw material assays showing specifically that Dibutyl Ether content is at or below 0.3% (3,000 ppm).
c. Maintain monthly production rates and hours of operation of MBTTC/DBTDC process. The compliance with annual limit shall be based on rolling 12 month total. At the beginning of each month the rolling 12 month totals shall be calculated for the past 12 months.

2. Emission Limitations:

a. Refer to Section D.
b. Pursuant to 401 KAR 59:010, emissions of particulate matter for emission points DC05 -1,000 gal. high-temp reactor, RX-0505 and DT05 - Drum/tote loading and unloading shall not exceed the allowable rate limit as calculated by the following equation using the process weight rate (in units of emission unit (tons/hr)).
For process rates rates up to 60,000 lbs/hr: $E = 3.59P^{0.62}$
For the equation: E = rate of emissions in lb/hr, and
P = process weight rate in tons/hr.

For processing rates less than 1,000 lbs/hr, PM/PM10 emissions shall not exceed 2.34 lbs/hr.

c. Pursuant to 401 KAR 59:010, Section 3, no person shall cause, suffer, allow, or permit any continuous emission into the open air from a control device or stack which is equal to or greater than twenty (20) percent opacity. Please refer to Section B.4.a.

SECTION B – EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS AND OPERATING CONDITIONS (CONTINUED)

Compliance Demonstration Method:

a. For the particulate matter emission and opacity limits, please refer to Section B.4., Specific Monitoring Requirements.
b. Refer to Section B.5, Recordkeeping Requirements.

3. Testing Requirements:

a. Pursuant to 401 KAR 59:005, Section 2(2) and 401 KAR 50:045, Section 1, performance testing in accordance with EPA Reference Method 5, as referenced in 401 KAR 50:015, Section 1, shall be conducted as required by the Division.

b. Pursuant to 401 KAR 50:045, Section 1, performance testing in accordance with EPA Reference Method 25 or 25a, as referenced in 401 KAR 50:015, Section 1, shall be conducted as required by the Division. Please refer to Section G (d) 6.

4. Specific Monitoring Requirements:

a. Monitor the opacity of visible emissions for each affected Emission Point in accordance with the following:
   Refer to Section D., Opacity Monitoring of Emission Unit.
b. Monitor the annual production rate of MBTTC and Dibutyltin Dichloride, based on a 12 month rolling total and raw material analysis on a monthly basis.
c. Maintain monthly records of throughputs and hours of operation of processed materials at emission units listed in Section B.2, to show compliance with emission limitations of 401 KAR 59:010, New process operations.
d. Monitor and maintain records of raw material assays showing specifically that Dibutyl Ether content of each batch of butyl crudes.

5. Specific Recordkeeping Requirements:

a. Maintain records of analysis for verification that dibutyl ether content of butyl crudes raw material shall be maintained at 0.3% (3000 ppm) or less.
b. Maintain records on the monthly and annual production rate of MBTTC anhydrous/DBTDC and of Dibutyltin Dichloride based on a 12 month rolling total.
c. Maintain annual production records of catalyzed dibutyltin dichloride.
d. Refer to Section B.4. Specific Monitoring Requirements, above.

SECTION B – EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS AND OPERATING CONDITIONS (CONTINUED)

6. Specific Reporting Requirements:

Semiannual summary reports of VOC emissions shall be made to the Division within 30 days after the end of each period. The reports shall include a description of monthly VOC emissions, in tons, and the 12-month annual rolling total VOC emission rate, in tons.

7. Specific Control Equipment Operating Conditions:

The vent condensers and chillers in process building B-05 shall be operated in accordance with manufacturer's specifications and/or standard operating procedures.

SECTION B – EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS AND OPERATING CONDITIONS (CONTINUED)

PRODUCTION AREA B-48

Emission Point(s)	Process ID (Installation Date)	Process Description
(HT48)	4,000 gal. #1 Filter Hold Tank, TK-4810 (1998)	Interim storage
	400 gal. DBTC Hot Water Tank, TK-4847 (1975)	(same)
	3,000 gal. #5 Vessel Split Tank, TK-4807 (1997)	(same)
	1,500 gal. #2 Vessel Split Tank, TK-4809 (1975)	(same)
	4,000 gal. #2 Filter Feed Tank, TK-4811 (1975)	(same)
	4,000 gal. #4 Filter Feed Tank, TK-4818 (1996)	(same)
	4,000 gal. #3 Filter Feed Tank, TK-4819 (1979)	(same)
	1,000 gal. Glycol Hold Tank, TK-4836 (1996)	(same)
	25 gal. Heptane Hold Tank, TK-4850 (1996)	(same)
	810 gal. Tintet Weigh Tank, WT-4835 (1984)	(same)
	1,500 gal. #3 Reactor Vacuum Receiver, WT-4838 (1975)	(same)
	1,500 gal. 60/40 As Is Weigh Tank, WT-4840 (N/A)	(same)
	Seal Liquid Accumulator, TK-4870 (1998)	(same)
73(HT55)	4,000 gal. Methyltin Split Tank, TK-4814 (1999)	(same)
77(RC55)	4,000 gal. Methyltin Split Tank, TK-4815 (1999)	(same)
(MT48)	8,000 gal. Blend Tank, TK-4813 (1996)	(same)
(RC48V)	1,000 gal. #1 Receiver Tank, TK-4834 (1994)	Product/material receiving
	1,000 gal. #2 Receiver Tank, TK-4837 (1986)	(same)
	1,000 gal. #5 Vac. Receiver Tank, TK-4844 (1988)	(same)
	250 gal. Cooling Water Surge Pot, TK-4861 (1997)	(same)
(TE48)	Pipeline/Transport Equipment (N/A)	Pumps, pipes, valves, etc.
(RX48V)	3,000 gal. #1 Reactor, RX-4801 (1974)	Chemical reaction
	3,000 gal. #2 Reactor, RX-4802 (1977)	(same)
	3,000 gal. #3 Reactor, RX-4803 (1974)	(same)
	3,000 gal. #4 Reactor, RX-4804 (1971)	(same)

SECTION B – EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS AND OPERATING CONDITIONS (CONTINUED)

Emission Point(s)	Process ID (Installation Date)	Process Description
	6,000 gal. #5 Reactor, RX-4805 (1995)	(same)
(PF48)	Portable Niagara Filter, FI-4856 (1975)	Product filtering
	Portable Niagara Filter, FI-4859 (1956)	(same)
	Portable Niagara Filter, FI-4860 (1967)	(same)
	Portable Niagara Filter, FI-4862 (1995)	(same)
	Filter, FI-4816 (1998)	
(ST48)	4,000 gal. Mono Solution Tank, RX-4868 (1973)	Material handling/storage
	1,000 gal. TBTC Storage Tank, TK-4841 (1989)	(same)
	6,000 gal. DBTC Storage/Weigh Tank, TK-4848 (1952)	(same)

Note: For the Emission Point designations, the V refers to venting under vacuum conditions.

APPLICABLE REGULATIONS:

401 KAR 59:010, *New process operations, which applies to emission units constructed on or after July 2, 1975*.

401 KAR 61:060, *Existing Source Standard for Solvent Operations*

401 KAR 63:020, *Potentially hazardous matter or toxic substances*

REGULATIONS NOT APPLICABLE:

401 KAR 51:017, *Prevention of significant deterioration of air quality*

401 KAR 60:005, Section 3(uu). Incorporating by reference 40 CFR 60.480 to 60.489 (Subpart VV), *Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry.*

401 KAR 57:040. *Equipment leaks of benzene*. Incorporating by reference 40 CFR Part 61, Subpart J (40 CFR 61.110 to 61.112), *National Emission Standard for Equipment Leaks (Fugitive Emission Sources) of Benzene.*

401 KAR 57:035. *National emission standard for equipment leaks (fugitive emission sources)*. Incorporating by reference 40 CFR Part 61, Subpart V (40 CFR 61.240 to 61.247), *National Emission Standard for Equipment Leaks (Fugitive Emission Sources).*

401 KAR 63:002, Section 3(c). Incorporating by reference 40 CFR 63.100 to 63.106 (Subpart F), *National Emission Standards for Organic Hazardous Air Pollutants From the Synthetic Organic Chemical Manufacturing Industry.*

SECTION B – EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS AND OPERATING CONDITIONS (CONTINUED)

1. Operating Limitations:

Synthetic Minor limits:

a. Maximum annual production of plastic stabilizers (Methyl, Butyl or Octyl) shall not exceed 80,000,000 pounds during any 12 consecutive months.
b. Manufacture of Monobutyltin Trichloride via heptane separation method shall be discontinued.
c. Production of organic based stabilizers shall be discontinued. Products listed in Table A are solvent free stabilizers.

TABLE A
B-48 Product List

STABILIZERS/CATALYSTS	
T-1	T-890S (T 890 TFE)
T-12	T-890
PA 4062	Thermolite 66
PA4076	Thermolite 108 (PA-1739 FA)
PA4077	Thermolite 20 (T-120)
PA4080	Thermolite 133
PA4089	Thermolite 137
CNF-1173	Thermolite 139
CNF-1399 (PA-1889)	Thermolite 175
CNF-1448	Thermolite 176
CNF-266	Thermolite 176c
DM-9802	Thermolite 20
PA-1121	Thermolite 31
DM-9943	Thermolite 31 Super
Fastcat 4102	Thermolite 31 TFE
Fastcat 4233	Thermolite 31 Super TFE
PA-1666 (CNF-1309)(T-390)	Thermolite 310
PA-1776 (CNF-1550)	Thermolite 340
PA-1796	Thermolite 892 w/2-EHMA*
PA-2162 (CNF-1496)	Thermolite 831
PA-4048	Thermolite 380
PI-1001A	Thermolite 197
Thermolite 140	Thermolite 190
Thermolite 161	**STABILIZER INTERMEDIATES**
Thermolite 191	Monobutyltin Trichloride 60/40
Thermolite 192	Dibutyltin Dichloride (Fastcat 4210)
Thermolite 290	PA-2283 (CNF-1587)
Thermolite 300	

Compliance Demonstration Method:

a. Maintain records of the type (organic based vs inorganic based) and monthly production of plastic stabilizers. Refer to Sections 4 and 5, below. The compliance with annual limit shall

SECTION B – EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS AND OPERATING CONDITIONS (CONTINUED)

be based on a rolling 12 month total. At the beginning of each month the rolling 12 month totals shall be calculated for the past 12 months.

b. When materials are processed that will produce particulate emissions refer to Section B.4**.**

2. Emission Limitations:

a. Pursuant to 401 KAR 59:010, emissions of particulate matter from emission point RX48V: 3,000 gal. #1 Reactor, RX-480; 3,000 gal. #2 Reactor, RX-4802; 3,000 gal. #3 Reactor, RX-4803; 3,000 gal. #4 Reactor, RX-4804; and 6,000 gal. #5 Reactor, RX-4805 shall not exceed the allowable rate limit as calculated by the following equation using the process weight rate (in units of reactor/(tons/hr)).
For process rates up to 60,000 lbs/hr: $E = 3.59P^{0.62}$
For the equation: E = rate of emissions in lb/hr, and
P = process weight rate in tons/hr.
For processing rates less than 1,000 lbs/hr, PM/PM10 emissions shall not exceed 2.34 lbs/hr.

b. Pursuant to 401 KAR 59:010, Section 3, no person shall cause, suffer, allow, or permit any continuous emission into the open air from a control device or stack which is equal to or greater than twenty (20) percent opacity. Please refer to Section B.4.a.

c. Pursuant to 401 KAR 61:060, Section 3(1), affected facilities using organic solvents shall not discharge more than 40 pounds per day or 8 pounds per hour unless said emissions have been reduced by 85%.

Compliance Demonstration Method:

a. The permittee shall assure compliance with the opacity limitations for each emission point listed in the above production area table by conducting visible emission observations in accordance with Section B.4.a. (below).

b. Refer to Section B.4., Specific Monitoring Requirements.

c. The permittee shall assure compliance with 401 KAR 61:060 by ensuring that less than 15% of the solvent used is emitted. This shall be calculated by using the following equations:

% Solvent emitted = Monthly Air Emissions / Total Solvent Charged into Batches

Monthly Air Emissions (lb of VOC/month) = PQMw/RT
Where,
P = vapor pressure (psia) of "worst case" solvent, Q = nitrogen flowrate associated with solvent usage (ft^3/month), Mw = molecular weight, R= Ideal gas law constant, and T = Degrees R

Total Solvent Charged into Batches (all products) = Sum of (# Batches * lb organic solvent per batch) for each product made.

SECTION B – EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS AND OPERATING CONDITIONS (CONTINUED)

3. Testing Requirements:

a. Pursuant to 401 KAR 59:005, Section 2(2) and 401 KAR 50:045, Section 1, performance testing in accordance with EPA Reference Method 5, as referenced in 401 KAR 50:015, Section 1, shall be conducted as required by the Division.

b. Pursuant to 401 KAR 50:045, Section 1, performance testing in accordance with EPA Reference Method 25, VOC emissions, as referenced in 401 KAR 50:015, Section 1, shall be conducted as required by the Division. Please refer to Section G(d)6.

4. Specific Monitoring Requirements:

a. Monitor the opacity of visible emissions for each affected emission point in accordance with Section B.2**.** and the following: Refer to Section D., Opacity Monitoring of Emission Unit.
b. Monitor the operating parameters at the specified frequency for each control device. Refer to the respective control device table in Section B. 7.
c. Maintain monthly records of throughputs and hours of operation of processed materials at emission units listed in Section B.2.
d. Calculate the VOC emission rates from the B48 production area on a monthly basis.
e. Calculate the average percent solvent emitted on a monthly basis.

5. Specific Recordkeeping Requirements:

The permittee shall record and maintain such records of the following information:
a. The visual inspections or opacity of emissions for each affected Emission Point in accordance with Sections B.2. and 4 (above).
b. Maintain records of the operating parameters for the respective control device.
c. Maintain records of production of plastic stabilizers.
d. Refer to the monitoring and operating parameters under control equipment table for Area B-48.
d. Refer to Section B.4., Specific Monitoring Requirements, above.

6. Specific Reporting Requirements:

The permittee shall report the monthly and 12 consecutive month production rate for plastic stabilizers produced. These reports shall be submitted on a semi-annual basis or at the request of the Division.

7. Specific Control Equipment Operating Conditions:

SECTION B – EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS AND OPERATING CONDITIONS (CONTINUED)

Control Equipment Area B-48

Emission Point(s)	**Control Equipment**	**Operating Parameters** (check once per shift)	**Comments**
(RX48) *RX-4802, RX-4803, RX-4804, RX-4805* **(HT48)** *TK-4807, TK-4810, TK-4819* **(HT55)** *TK-4814* **(RC55)** *TK-4815*	Packed-Bed Scrubber, Clean Gas Systems Model Unit Size 18, CO-4867 (1996)	Water Flowrate: * Pressure Drop: * pH: *	a) Refer to Section I b) Exceedence of operating parameters shall be reported and/or repaired in accordance with Section F.6.

* To be maintained within manufacturers specified ranges or ranges determined during testing

a. Scrubber CO-4867 shall be operated in accordance with the manufacture's standard recommended operating procedures at all times the emission point is in operation.
b. The scrubber shall be inspected on an annual basis. Preventive maintenance shall be performed in accordance with manufacturer specifications. The scrubber shall be inspected on an annual basis for proper operation of the following:
   1. Scrubber liquid pump(s)
   2. Scrubber liquid spray nozzles
   3. Scrubber internals
   4. pH instrumentation
b. The permittee shall record the occurrence, duration, cause, and any corrective action taken for each incident when the emission points are in operation but the associated air pollution control equipment is not. For purposes of emission calculations, during any time interval that the control device(s) is(are) inoperative, the control efficiency will be assumed to be zero.

SECTION C - INSIGNIFICANT ACTIVITIES

The following listed activities have been determined to be insignificant activities for this source pursuant to 401 KAR 52:020, Section 6. While these activities are designated as insignificant the permittee must comply with the applicable regulation and some minimal level of periodic monitoring may be necessary.

Description		Generally Applicable Regulation
B-05		
RC05	50 gal. Hot Oil Expansion Tank, TK-0508B Product/material receiving	NA
RC05	250 gal. Oil Expansion Tank, TK-0550 Product/material receiving	NA
B-48		
None		

SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS

Opacity Monitoring of Emission Unit:

The permittee shall monitor the opacity of visible emissions for each affected emission once per calendar day when any specified emissions unit is operating. The permittee shall survey for visible emissions and maintain a daily log noting the following information:

i. Whether any air emissions were visible from any of the respective emissions unit;
ii. All emission points from which visible emissions were observed;
iii. Whether the visible emissions were normal for the respective emissions unit.
If no visible emissions are observed then no further monitoring is required. If visible emissions are observed, the permittee shall perform the following:
iv. The permittee shall perform a Method 9 reading for emission points of concern. The opacity observed shall be recorded in the daily log. The reading shall be performed by a representative of the permittee certified in Visible Emissions Evaluations. The permittee shall maintain a list of all individuals that are certified Visible Emissions Evaluators and the date of certification.

SECTION E - SOURCE CONTROL EQUIPMENT REQUIREMENTS

Pursuant to 401 KAR 50:055, Section 2(5), at all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Division which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

SECTION F - MONITORING, RECORD KEEPING, AND REPORTING REQUIREMENTS

1. When continuing compliance is demonstrated by periodic testing or instrumental monitoring, the permittee shall compile records of required monitoring information that include:
   a. Date, place as defined in this permit, and time of sampling or measurements.
   b. Analyses performance dates;
   c. Company or entity that performed analyses;
   d. Analytical techniques or methods used;
   e. Analyses results; and
   f. Operating conditions during time of sampling or measurement.
   [Material incorporated by reference by 401 KAR 52:020, Section 1b (IV)1
2. Records of all required monitoring data and support information, including calibrations, maintenance records, and original strip chart recordings, and copies of all reports required by the Division for Air Quality, shall be retained by the permittee for a period of five years and shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality. [Material incorporated by reference by 401 KAR 52:020, Sections 1b(IV) 2 and 1a(8)]
3. In accordance with the requirements of 401 KAR 52:020 Section 3(1)h the permittee shall allow authorized representatives of the Cabinet to perform the following during reasonable times:
   a. Enter upon the premises to inspect any facility, equipment (including air pollution control equipment), practice, or operation;
   b. To access and copy any records required by the permit:
   c. Inspect, at reasonable times, any facilities, equipment (including monitoring and pollution control equipment), practices, or operations required by the permit.
   d. Sample or monitor, at reasonable times, substances or parameters to assure compliance with the permit or any applicable requirements.
   e. Reasonable times are defined as during all hours of operation, during normal office hours; or during an emergency.
4. No person shall obstruct, hamper, or interfere with any Cabinet employee or authorized representative while in the process of carrying out official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.
5. Summary reports of any monitoring required by this permit, other than continuous emission or opacity monitors, shall be submitted to the Regional Office listed on the front of this permit at least every six (6) months during the life of this permit, unless otherwise stated in this permit. For emission units that were still under construction or which had not commenced operation at the end of the 6-month period covered by the report and are subject to monitoring requirements in this permit, the report shall indicate that no monitoring was performed during the previous six months because the emission unit was not in operation.
   [Material incorporated by reference by 401 KAR 52:020, Section 1b (V)1.]

SECTION F - MONITORING, RECORD KEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

6. The semi-annual reports are due prior to January 30th and July 30th of each year. Data from the continuous emission and opacity monitors shall be reported to the Technical Services Branch in accordance with the requirements of 401 KAR 59:005, General Provisions, Section 3(3). All reports shall be certified by a responsible official pursuant to 401 KAR 52:020 Section 23. All deviations from permit requirements shall be clearly identified in the reports.
7. In accordance with the provisions of 401 KAR 50:055, Section 1 the owner or operator shall notify the Regional Office listed on the front of this permit concerning startups, shutdowns, or malfunctions as follows:
   a. When emissions during any planned shutdowns and ensuing startups will exceed the standards notification shall be made no later than three (3) days before the planned shutdown, or immediately following the decision to shut down, if the shutdown is due to events which could not have been foreseen three (3) days before the shutdown.
   b. When emissions due to malfunctions, unplanned shutdowns and ensuing startups are or may be in excess of the standards notification shall be made as promptly as possible by telephone (or other electronic media) and shall cause written notice upon request.
8. The owner or operator shall report emission related exceedances from permit requirements including those attributed to upset conditions (other than emission exceedances covered by Section F.7. above) to the Regional Office listed on the front of this permit within 30 days. Other deviations from permit requirements shall be included in the semiannual report required by Section F.6. [Material incorporated by reference by 401 KAR 52:020, Section 1b V 3, 4.]
9. Pursuant to 401 KAR 52:020, Permits, Section 21, the permittee shall certify compliance with the terms and conditions contained in this permit, by completing and returning a Compliance Certification Form (DEP 7007CC) (or an alternative approved by the regional office) to the Regional Office listed on the front of this permit and the U.S. EPA in accordance with the following requirements:
   a. Identification of the term or condition;
   b. Compliance status of each term or condition of the permit;
   c. Whether compliance was continuous or intermittent;
   d. The method used for determining the compliance status for the source, currently and over the reporting period, and
   e. For an emissions unit that was still under construction or which has not commenced operation at the end of the 12-month period covered by the annual compliance certification, the permittee shall indicate that the unit is under construction and that compliance with any applicable requirements will be demonstrated within the timeframes specified in the permit.

SECTION F - MONITORING, RECORD KEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

f. The certification shall be postmarked by January 30th of each year. Annual compliance certifications should be mailed to the following addresses:

Division for Air Quality
Florence Regional Office
8020 Veterans Memorial Drive
Suite 110
Florence, KY 41042

U.S. EPA Region IV
Air Enforcement Branch
Atlanta Federal Center
61 Forsyth St.
Atlanta, GA 30303-8960

Division for Air Quality
Central Files
803 Schenkel Lane
Frankfort, KY 40601

10. In accordance with 401 KAR 52:020, Section 22, the permittee shall provide the Division with all information necessary to determine its subject emissions within thirty (30) days of the date the KYEIS emission survey is mailed to the permittee.

11. Pursuant to Section VII.3 of the policy manual of the Division for Air Quality as referenced in 401 KAR 50:016, Section 1(1), results of performance test(s) required by the permit shall be submitted to the division by the source or its representative within forty-five days after the completion of the fieldwork.

12. Log and records required by this permit may be collected and maintained electronically.

13. Pursuant to 401 KAR 50:055, Section 1and 40 CFR 63, Subpart A, the permittee shall develop a start-up, shutdown, malfunction plan for all affected facilities. The start-up, shutdown, malfunction plan shall included identification of all emergency vents. A logbook shall be maintained identifying the emergency vent, duration of any emergency venting, flowrate during emergency venting, identification of pollutant emitted during emergency venting, and pollutant emission rate during emergency venting. The annual emission totals shall include any emergency emission rates.

SECTION G - GENERAL CONDITIONS

(a) General Compliance Requirements

1. The permittee shall comply with all conditions of this permit. Noncompliance shall be a violation of 401 KAR 52:020 and of the Clean Air Act and is grounds for enforcement action including termination, revocation and reissuance, revision or denial of a permit. [Material incorporated by reference by 401 KAR 52:020, Section 1a, 3]

2. The filing of a request by the permittee for any permit revision, revocation, reissuance, or termination, or of a notification of a planned change or anticipated noncompliance, shall not stay any permit condition. [Material incorporated by reference by 401 KAR 52:020, Section 1a, 6]

3. This permit may be revised, revoked, reopened and reissued, or terminated for cause in accordance with 401 KAR 52:020, Section 19. The permit will be reopened for cause and revised accordingly under the following circumstances:
   a. If additional requirements become applicable to the source and the remaining permit term is three (3) years or longer. In this case, the reopening shall be completed no later than eighteen (18) months after promulgation of the applicable requirement. A reopening shall not be required if compliance with the applicable requirement is not required until after the date on which the permit is due to expire, unless this permit or any of its terms and conditions have been extended pursuant to 401 KAR 52:020, Section 12;
   b. The Cabinet or the U. S. EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements;
   c. The Cabinet or the U. S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit;
   d. If any additional applicable requirements of the Acid Rain Program become applicable to the source. [Acid Rain sources only]

   Proceedings to reopen and reissue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Reopenings shall be made as expeditiously as practicable. Reopenings shall not be initiated before a notice of intent to reopen is provided to the source by the Division, at least thirty (30) days in advance of the date the permit is to be reopened, except that the Division may provide a shorter time period in the case of an emergency.
4. The permittee shall furnish information upon requested by the Cabinet to determine if cause exists for modifying, revoking and reissuing, or terminating the permit; or compliance with the permit. [Material incorporated by reference by 401 KAR 52:020, Section 1a, 7,8]
5. The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such facts or corrected information to the permitting authority. [Material incorporated by reference by 401 KAR 52:020, Section 7(1)]

SECTION G - GENERAL PROVISIONS (CONTINUED)

6. Any condition or portion of this permit which becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this permit. [Material incorporated by reference by 401 KAR 52:020, Section 1a, 14]

7. The permittee shall not use as a defense in an enforcement action the contention that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance. [Material incorporated by reference by 401 KAR 52:020, Section 1a, 4]

8. Except for requirements identified in this permit as state-origin requirements, all terms and conditions shall be enforceable by the United States Environmental Protection Agency and citizens of the United States. [Material incorporated by reference by 401 KAR 52:020, Section 1a, 15) b]

9. This permit shall be subject to suspension if the permittee fails to pay all emissions fees within 90 days after the date of notice as specified in 401 KAR 50:038, Section 3(6). [Material incorporated by reference by 401 KAR 52:020, Section 1a, 10]

10. Nothing in this permit shall alter or affect the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance. [401 KAR 52:020, Section 11(3)(b)]

11. This permit does not convey property rights or exclusive privileges. [Material incorporated by reference by 401 KAR 52:020, Section 1a, 9]

12. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Kentucky Cabinet for Natural Resources and Environmental Protection or any other federal, state, or local agency.

13. Nothing in this permit shall alter or affect the authority of U.S. EPA to obtain information pursuant to Federal Statute 42 USC 7414, Inspections, monitoring, and entry. [401 KAR 52:020, Section 11(3)(d)].

14. Nothing in this permit shall alter or affect the authority of U.S. EPA to impose emergency orders pursuant to Federal Statute 42 USC 7603, Emergency orders. [401 KAR 52:020, Section 11(3)(a)]

15. Permit Shield - A permit shield shall not protect the owner or operator from enforcement actions for violating an applicable requirement prior to or at the time of permit issuance. Compliance with the conditions of a permit shall be considered compliance with:
(a) Applicable requirements that are included and specifically identified in the permit and
(b) Non-applicable requirements expressly identified in this permit.

16. This permit consolidates the authority of any previously issued PSD, NSR, or Synthetic minor source preconstruction permit terms and conditions for various emission units and incorporates all requirements of those existing permits into one single permit for this source.

SECTION G - GENERAL PROVISIONS (CONTINUED)

(b) Permit Expiration and Reapplication Requirements

1. This permit shall remain in effect for a fixed term of five (5) years following the original date of issue. Permit expiration shall terminate the source's right to operate unless a timely and complete renewal application has been submitted to the Division at least six months prior to the expiration date of the permit. Upon a timely and complete submittal, the authorization to operate within the terms and conditions of this permit, including any permit shield, shall remain in effect beyond the expiration date, until the renewal permit is issued or denied by the Division. [401 KAR 52:020, Section 12]
2. The authority to operate granted shall cease to apply if the source fails to submit additional information requested by the division after the completeness determination has been made on any application, by whatever deadline the Division sets. [401 KAR 52:020 Section 8(2)]

(c) Permit Revisions

1. A minor permit revision procedure may be used for permit revisions involving the use of economic incentive, marketable permit, emission trading, and other similar approaches, to the extent that these minor permit revision procedures are explicitly provided for in the SIP or in applicable requirements and meet the relevant requirements of 401 KAR 52:020, Section 14(2).

2. This permit is not transferable by the permittee. Future owners and operators shall obtain a new permit from the Division for Air Quality. The new permit may be processed as an administrative amendment if no other change in this permit is necessary, and provided that a written agreement containing a specific date for transfer of permit responsibility coverage and liability between the current and new permittee has been submitted to the permitting authority within ten (10) days following the transfer.

(d) Construction, Start-Up, and Initial Compliance Demonstration Requirements

1. Construction of process and/or air pollution control equipment authorized by this permit shall be conducted and completed only in compliance with the conditions of this permit.

2. Within thirty (30) days following commencement of construction and within fifteen (15) days following start-up and attainment of the maximum production rate specified in the permit application, or within fifteen (15) days following the issuance date of this permit, whichever is later, the permittee shall furnish to the Regional Office listed on the front of this permit in writing, with a copy to the Division's Frankfort Central Office, notification of the following:
   a. The date when construction commenced.
   b. The date of start-up of the affected facilities listed in this permit.
   c. The date when the maximum production rate specified in the permit application was achieved.

SECTION G - GENERAL PROVISIONS (CONTINUED)

3. Pursuant to 401 KAR 52:020, Section 3(2), unless construction is commenced within eighteen (18) months after the permit is issued, or begins but is discontinued for a period of eighteen (18) months or is not completed within a reasonable timeframe then the construction and operating authority granted by this permit for those affected facilities for which construction was not completed shall immediately become invalid. Upon written request, the Cabinet may extend these time periods if the source shows good cause.

4. For those affected facilities for which construction is authorized by this permit, a source shall be allowed to construct with the proposed permit. Operational or final permit approval is not granted by this permit until compliance with the applicable standards specified herein has been demonstrated pursuant to 401 KAR 50:055. If compliance is not demonstrated within the prescribed timeframe provided in 401 KAR 50:055, the source shall operate thereafter only for the purpose of demonstrating compliance, unless otherwise authorized by Section I of this permit or order of the Cabinet.

5. This permit shall allow time for the initial start-up, operation, and compliance demonstration of the affected facilities listed herein. However, within sixty (60) days after achieving the maximum production rate at which the affected facilities will be operated but not later than 180 days after initial start-up of such facilities, the permittee shall conduct a performance demonstration on the affected facilities in accordance with 401 KAR 50:055, General compliance requirements.

6. Pursuant to Section VII 2.(1) of the policy manual of the Division for Air Quality as referenced by 401 KAR 50:016, Section 1.(1), at least one month prior to the date of the required performance test, the permittee shall complete and return a Compliance Test Protocol (Form DEP 6027) to the division's Frankfort Central Office. Pursuant to 401 KAR 50:045, Section 5, the Division shall be notified of the actual test date at least ten (10) days prior to the test

(e) Acid Rain Program Requirements

If an applicable requirement of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act) is more stringent than an applicable requirement promulgated pursuant to Federal Statute 42 USC 7651 through 7651o (Title IV of the Act), both provisions shall apply, and both shall be state and federally enforceable.

SECTION G - GENERAL PROVISIONS (CONTINUED)

(f) Emergency Provisions

1. Pursuant to 401 KAR 52:020 Section 24(1), an emergency shall constitute an affirmative defense to an action brought for the noncompliance with the technology-based emission limitations if the permittee demonstrates through properly signed contemporaneous operating logs or relevant evidence that:

   a. An emergency occurred and the permittee can identify the cause of the emergency;
   b. The permitted facility was at the time being properly operated;
   c. During an emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and
   d. The permittee notified the Division as promptly as possible and submitted written notice of the emergency to the Division within ten (10) working days of the time when emission limitations were exceeded due to the emergency. The notice shall include a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.
   e. This requirement does not relieve the source from other local, state or federal notification requirements.

2. Emergency conditions listed in General Condition (f)1 above are in addition to any emergency or upset provision(s) contained in an applicable requirement. [401 KAR 52:020, Section 24(3)]

3. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof. [401 KAR 52:020, Section 24(2)]

(g) Risk Management Provisions

The permittee shall comply with all applicable requirements of 401 KAR Chapter 68, Chemical Accident Prevention, which incorporates by reference 40 CFR Part 68, Risk Management Plan provisions. If required, the permittee shall comply with the Risk Management Program and submit a Risk Management Plan to:

RMP Reporting Center
P.O. Box 3346
Merrifield, VA, 22116-3346

2. If requested, submit additional relevant information to the Division or the U.S. EPA.

SECTION G - GENERAL PROVISIONS (CONTINUED)

(h) Ozone depleting substances

1. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
   a. Persons opening appliances for maintenance, service, repair, or disposal shall comply with the required practices contained in 40 CFR 82.156.
   b. Equipment used during the maintenance, service, repair, or disposal of appliances shall comply with the standards for recycling and recovery equipment contained in 40 CFR 82.158.
   c. Persons performing maintenance, service, repair, or disposal of appliances shall be certified by an approved technician certification program pursuant to 40 CFR 82.161.
   d. Persons disposing of small appliances, MVACs, and MVAC-like appliances (as defined at 40 CFR 82.152) shall comply with the recordkeeping requirements pursuant to 40 CFR 82.166.
   e. Persons owning commercial or industrial process refrigeration equipment shall comply with the leak repair requirements pursuant to 40 CFR 82.156.
   f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant shall keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166.
2. If the permittee performs service on motor (fleet) vehicle air conditioners containing ozone-depleting substances, the source shall comply with all applicable requirements as specified in 40 CFR 82, Subpart B, Servicing of Motor Vehicle Air Conditioners.

SECTION H - ALTERNATE OPERATING SCENARIOS

Not Applicable

SECTION I - COMPLIANCE SCHEDULE

To implement any new monitoring, recordkeeping, reporting, and requirements included herein, the Division hereby authorizes a ninety (90) day compliance schedule, beginning with issuance of the final permit.

Within 180 days of final permit issuance, the permittee shall establish control device operating parameters (acceptable ranges) for those not reported in the Title V operating permit application. Please refer to the respective control equipment table.